



PHANTOM® UHF ANTENNA OUTPERFORMS CONVENTIONAL MOBILE ANTENNAS IN MANY APPLICATIONS

Laird Technologies’ unique patented Phantom® is a tough antenna for outdoor or indoor applications. Measuring only 3.5” tall, the Phantom® UHF antenna’s revolutionary design features field diversity with both vertical and horizontal polarization components. This gives the antenna diversity, frequency agility, low visibility, wide bandwidth and a low angle radiation pattern that is superior to traditional gain antennas in most applications.

The industry standard NMO mounting socket mates with all Laird Technologies’ magnetic, trunk lid, and hole mounts. A threaded permanent stud mount model is also available for vandal resistant mounting on brackets, panels, ceilings or any other kind of housing.

The Phantom® patented technology is beneficial when high performance is desired and extreme ruggedness and low profile is required.

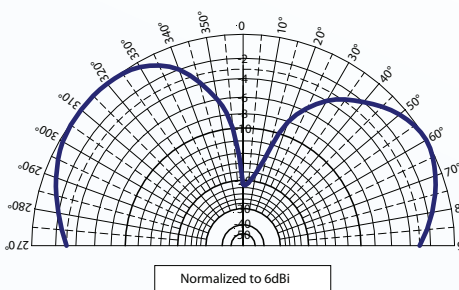
FEATURES 

- True Field Diversity design ensures uninterrupted transmissions in urban canyons and rural drop off areas
- 3 dB Gain (MEG) outperforms a 3 dB whip in many applications
- U.S. Patent Nos. 5,977,931 – 6,292,156 and 7,209,096

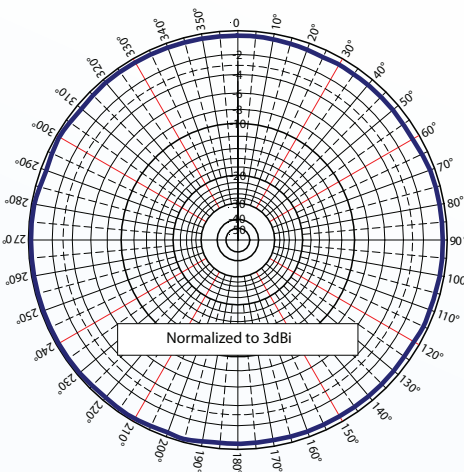
MARKETS

- Public safety
- Transportation
- Utility
- Military mobile
- Fixed radio applications.

ANTENNA PATTERNS



Elevation Pattern (Y, Z, or H-plane)



Azimuthal Pattern (Y, Z, or E-plane)

global solutions: local support.™

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SPECIFICATIONS

ELECTRICAL	
Frequency Range	450-470 MHz
VSWR	< 2.1 Max
Nominal Gain	3 dBi MEG
Maxmium Power	150 W
Nominal Impedance	50 Ω
Polarization	Vertical
Pattern	Omnidirectional
Half-Power Beamwidth (Elevation° x Azimuth°)	146° x 360°
Coaxial Cable Length & Type (For Vertical Polarization)	None
Terminations	NMO
Noise Suppressor	BlackHawk NS1535 1-35 VOLT, 15 amp Noise suppressor (Sold Separately)

MECHANICAL	
Height (Initially)	3½"
Diameter	1.438"
Operating Temperature	-40°C to +85°C
Rated Wind Velocity	125 mph (210 kph)
Rated Wind Velocity (with 0.5" radial ice)	85 mph (137 kph)
Lateral Thrust @ 125mph Wind Velocity	57 lbs. (26kg)
Wind Resistance in Sq. Feet	0.0356 Sq. ft.
Mounting Information	NMO Mountable

MODEL AND ORDERING INFORMATION

MODEL	DESCRIPTION
TRA4503	450-470 MHz 3 dB-MEG Phantom® ¾ NMO, White Radome
TRAB4503	450-470 MHz 3 dB-MEG Phantom® ¾ NMO, Black Radome

Permanent Mounting Option:

Please order by antenna model and insert letter "P" to indicate permanent mounting option (TRA4503P).

ANT-DS-TRA4503 0912

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